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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/026,326	12/21/2001	Christiaan M.H. Mets	120 01529 US	8069
128	7590	02/01/2005	EXAMINER	
HONEYWELL INTERNATIONAL INC.			LY, ANH	
101 COLUMBIA ROAD			ART UNIT	
P O BOX 2245			PAPER NUMBER	
MORRISTOWN, NJ 07962-2245			2162	

DATE MAILED: 02/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/026,326	METS ET AL.	
	Examiner	Art Unit	
	Anh Ly	2162	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>11/02/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is response to Applicants' Amendment filed on 11/23/2004.
2. Claims 1-41 are pending in this application.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5,613,113 issued to Goldring in view of US Patent No. 6,625,567 issued to McMahan.

With respect to claim 1, Goldring teaches (a) collecting an event data of an event of said process (collection of data of events with time (col. 1, lines 20-24; also see col. 1, lines 25-52).

(b) processing said event data according to a data structure that defines said event (processing the events having the characteristic of interest with time series data or time values: col. 3, lines 35-58, also see col. 4, lines 8-18 and abstract).

(c) storing said processed event data (recording the events with time value: col. 3, lines 35-58, col. 4, lines 8-14; also see col. 3, lines 18-25).

Goldring teaches processing event data in an activity log and periodically recording time series data value of interest. The time series as well as events or activities are stored in a relational database within a transaction oriented processing system and time series data is permitted easily synchronization with the stored transactions and the correlated events in an activity with time series data of interest are permitted examination by multiple users. The writing of the timestamp data associates a time value with the initialization activity and makes time series data available to processes and the time interval of the events are recorded in the activity log, and the event data and activity of event are stored in a relational database, or as in a data structure of relational database in the format of the tables (database tables; col. 3, lines

10-17, col. 4, lines 14-26). Goldring does not clearly teach an activity of said process having an interval that frames said event.

However, McMahan teaches state machines are used to identify events, that are occurring in industrial processes and these processes are recorded under time-tagged data in order to measure the time between starting and ending events or activities associated with industrial processes (see fig. 3 and col. 5, lines 8-18).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Goldring with the teachings of McMahan, wherein the activity log storing the events including the time interval of the event in the system provided therein (see fig. 2, item 32), would incorporate the use of time interval or time frame of an event such as starting time and ending time of an event, in the same conventional manner as described by McManhan (col. 5, lines 8-18). The motivation being for ease to retrieve the events and time series data of a process based on the attribute value or retrieval request in the event-based processing system.

With respect to claim 2, Goldring teaches wherein said data structure includes an activity structure that comprises an identity and a plurality of activity attributes for said activity (there is at least one or more attributes in a data record of a relational database: see fig. 3).

With respect to claim 3, Goldring teaches wherein said data structure further includes an event structure that comprises an identity of said event and one or more event attributes (see fig. 3, and col. 8, lines 60-67 and col. 9, lines 1-14).

With respect to claim 4, Goldring teaches wherein said activity attributes and said event attributes are selected from the group consisting of: time stamp, activity and item used in said process (see fig. 3, time stamp).

With respect to claim 5, Goldring teaches wherein said item is an equipment, and wherein said activity attributes and said event attributes has an attribute value selected from the group consisting of: date and time, activity identity and device of said equipment used in said process (see fig. 1 and col. 4, lines 58-67 and col. 5, lines 1-24).

With respect to claim 6, Goldring teaches wherein at least one of said event attributes matches at least one of said activity attributes (checking the time stamp or the begin time and ending time in the record of an event of an activity: col. 8, lines 60-67 and col. 9, lines 1-14; also col. 10, lines 12-45 and figs. 3 and 4).

With respect to claim 7, Goldring teaches wherein said event data is linked to said device of said equipment (see fig. 1).

Claim 8 is essentially the same as claim 1 except that it is directed to an apparatus rather than a method, and is rejected for the same reason as applied to the claim 1 hereinabove.

Claim 9 is essentially the same as claim 2 except that it is directed to an apparatus rather than a method, and is rejected for the same reason as applied to the claim 2 hereinabove.

Claim 10 is essentially the same as claim 3 except that it is directed to an apparatus rather than a method, and is rejected for the same reason as applied to the claim 3 hereinabove.

Claim 11 is essentially the same as claim 4 except that it is directed to an apparatus rather than a method, and is rejected for the same reason as applied to the claim 4 hereinabove.

Claim 12 is essentially the same as claim 5 except that it is directed to an apparatus rather than a method, and is rejected for the same reason as applied to the claim 5 hereinabove.

Claim 13 is essentially the same as claim 6 except that it is directed to an apparatus rather than a method, and is rejected for the same reason as applied to the claim 6 hereinabove.

Claim 14 is essentially the same as claim 7 except that it is directed to an apparatus rather than a method, and is rejected for the same reason as applied to the claim 7 hereinabove.

With respect to claim 15, Goldring teaches (a) identifying an activity of said process (processor is identified the activity via the event transactions: col. 7, lines 25-40); and

(c) processing said activity and said event to access said memory to retrieve said event data (accessing the activity via retrieving event by time value in the table: col. 7, lines 62-67, col. 8, lines 1-18, col. 9, lines 42-67 and col. 10, lines 1-10; also see figs. 3 and 4).

Goldring teaches processing event data in an activity log and periodically recording time series data value of interest. The time series as well as events or activities are stored in a relational database within a transaction oriented processing

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system and time series data is permitted easily synchronization with the stored transactions and the correlated events in an activity with time series data of interest are permitted examination by multiple users. The writing of the timestamp data associates a time value with the initialization activity and makes time series data available to processes and the time interval of the events are recorded in the activity log, and the event data (the event is identified via time values whose is recorded in the event table records: col. 8, lines 60-67, col. 9, lines 1-14 and col. 11, lines 1-8; also see fig.3) and activity of event are stored in a relational database, or as in a data structure of relational database in the format of the tables (database tables; col. 3, lines 10-17, col. 4, lines 14-26). Goldring does not clearly teach identifying an event of said process that is framed by an interval of said activity.

However, McMahan teaches state machines are used to identify events, that are occurring in industrial processes and these processes are recorded under time-tagged data in order to measure the time between starting and ending events or activities associated with industrial processes (see fig. 3 and col. 5, lines 8-18).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Goldring with the teachings of McMahan, wherein the activity log storing the events including the time interval of the event in the system provided therein (see fig. 2, item 32), would incorporate the use of time interval or time frames of an event such as starting time and ending time of an event, in the same conventional manner as described by McManhan (col. 5, lines 8-18). The motivation being for ease to retrieve the events and time series

data of a process based on the attribute value or retrieval request in the event-based processing system.

With respect to claim 16, Goldring teaches wherein said data structure includes an activity structure that comprises an identity and a plurality of activity attributes for said activity (there is at least one or more attributes in a data record of a relational database: see fig. 3).

With respect to claim 17, Goldring teaches wherein said data structure further includes an event structure that comprises an identity of said event and one or more event attributes (see fig. 3, and col. 8, lines 60-67 and col. 9, lines 1-14).

With respect to claim 18, Goldring teaches wherein said activity attributes and said event attributes are selected from the group consisting of: time stamp, activity and item used in said process (see fig. 3, time stamp).

With respect to claim 19, Goldring teaches wherein said item is an equipment, and wherein said activity attributes and said event attributes has an attribute value selected from the group consisting of: date and time, activity identity and device of said equipment used in said process (see fig. 1 and col. 4, lines 58-67 and col. 5, lines 1-24).

With respect to claim 20, Goldring teaches wherein at least one of said event attributes matches at least one of said activity attributes (checking the time stamp or the begin time and ending time in the record of an event of an activity: col. 8, lines 60-67 and col. 9, lines 1-14; also col. 10, lines 12-45 and figs. 3 and 4).

With respect to claim 21, Goldring teaches wherein said event data is linked to said device of said equipment (see fig. 1).

With respect to claim 22, Goldring teaches wherein step (b) identifies said event with a reference selected from the group consisting of: time based reference with respect to said interval, direct reference to said activity and indirect reference to said activity (col. 3, lines 35-67 and col. 4, lines 1-32).

With respect to claim 23, Goldring teaches wherein said time based reference is with respect to all events that occur during said interval (see abstract, col. 7, lines 5-18 and col. 11, lines 1-8).

With respect to claim 24, Goldring teaches wherein said direct reference directly refers to said activity (see abstract, col. 7, lines 62-67 and col. 8, lines 1-8).

With respect to claim 25, Goldring teaches wherein said indirect reference includes a reference to an item used by said process during said activity (col. 8, lines 36-58 and col. 9, lines 42-62).

Claim 26 is essentially the same as claim 15 except that it is directed to an apparatus rather than a method, and is rejected for the same reason as applied to the claim 15 hereinabove.

Claim 27 is essentially the same as claim 16 except that it is directed to an apparatus rather than a method, and is rejected for the same reason as applied to the claim 16 hereinabove.

Claim 28 is essentially the same as claim 17 except that it is directed to an apparatus rather than a method, and is rejected for the same reason as applied to the claim 17 hereinabove.

Claim 29 is essentially the same as claim 18 except that it is directed to an apparatus rather than a method, and is rejected for the same reason as applied to the claim 18 hereinabove.

Claim 30 is essentially the same as claim 19 except that it is directed to an apparatus rather than a method, and is rejected for the same reason as applied to the claim 19 hereinabove.

Claim 31 is essentially the same as claim 20 except that it is directed to an apparatus rather than a method, and is rejected for the same reason as applied to the claim 20 hereinabove.

Claim 32 is essentially the same as claim 21 except that it is directed to an apparatus rather than a method, and is rejected for the same reason as applied to the claim 21 hereinabove.

Claim 33 is essentially the same as claim 22 except that it is directed to an apparatus rather than a method, and is rejected for the same reason as applied to the claim 22 hereinabove.

Claim 34 is essentially the same as claim 23 except that it is directed to an apparatus rather than a method, and is rejected for the same reason as applied to the claim 23 hereinabove.

Claim 35 is essentially the same as claim 24 except that it is directed to an apparatus rather than a method, and is rejected for the same reason as applied to the claim 24 hereinabove.

Claim 36 is essentially the same as claim 25 except that it is directed to an apparatus rather than a method, and is rejected for the same reason as applied to the claim 25 hereinabove.

Claim 37 is essentially the same as claim 15 except that it is directed to a memory media for controlling a computer to process the data of a process rather than a method, and is rejected for the same reason as applied to the claim 15 hereinabove.

Claim 38 is essentially the same as claim 1 except that it is directed to a memory media for controlling a computer to process the data of a process rather than a method, and is rejected for the same reason as applied to the claim 1 hereinabove.

With respect to claim 39, Goldring teaches (a) processing said event data (processing the events having the characteristic of interest with time series data or time values: col. 3, lines 35-58, also see col. 4, lines 8-18 and abstract the event is identified via time values whose is recorded in the event table records: col. 8, lines 60-67, col. 9, lines 1-14 and col. 11, lines 1-8; also see fig.3); and

(b) processing said activity and event to access said memory and retrieve said event data (accessing the activity via retrieving event by time value in the table: col. 7, lines 62-67, col. 8, lines 1-18, col. 9, lines 42-67 and col. 10, lines 1-10; also see figs. 3 and 4).

Goldring teaches processing event data in an activity log and periodically recording time series data value of interest. The time series as well as events or activities are stored in a relational database within a transaction oriented processing system and time series data is permitted easily synchronization with the stored

transactions and the correlated events in an activity with time series data of interest are permitted examination by multiple users. The writing of the timestamp data associates a time value with the initialization activity and makes time series data available to processes and the time interval of the events are recorded in the activity log, and the event data (the event is identified via time values whose is recorded in the event table records: col. 8, lines 60-67, col. 9, lines 1-14 and col. 11, lines 1-8; also see fig.3) and activity of event are stored in a relational database, or as in a data structure of relational database in the format of the tables (database tables; col. 3, lines 10-17, col. 4, lines 14-26). Goldring does not clearly teach with an activity that has an activity interval that frames said event data for storage in a memory.

However, McMahan teaches state machines are used to identify events, that are occurring in industrial processes and these processes are recorded under time-tagged data in order to measure the time between starting and ending events or activities associated with industrial processes (see fig. 3 and col. 5, lines 8-18).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Goldring with the teachings of McMahan, wherein the activity log storing the events including the time interval of the event in the system provided therein (see fig. 2, item 32), would incorporate the use of time interval or time frames of an event such as starting time and ending time of an event, in the same conventional manner as described by McManhan (col. 5, lines 8-18). The motivation being for ease to retrieve the events and time series

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data of a process based on the attribute value or retrieval request in the event-based processing system.

Claim 40 is essentially the same as claim 39 except that it is directed to an apparatus rather than a method, and is rejected for the same reason as applied to the claim 39 hereinabove.

Claim 41 is essentially the same as claim 39 except that it is directed to a memory media for controlling a computer to process the data of a process rather than a method, and is rejected for the same reason as applied to the claim 39 hereinabove.

Conclusion

6. Applicant's submission of an information disclosure statement under 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17(p) on 11/02/2004 prompted the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 609(B)(2)(i). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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Contact Information

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh Ly whose telephone number is (571) 272-4039 or via E-Mail: ANH.LY@USPTO.GOV or fax to (571) 273-4039. The examiner can normally be reached on TUESDAY – THURSDAY from 8:30 AM – 3:30 PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene, can be reached on (571) 272-4107 or Primary Examiner Jean Corrielus (571) 272-4032.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to: Central Fax Center (703) 872-9306

ANH LY 
JAN. 24th, 2005


JEAN M. CORRIELUS
PRIMARY EXAMINER